GHG Inventory Management Training Course

Professional Development Training Course Outline

Category	Renewable Energy	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

GHG Inventory Management Training Course provides a practical, business-focused pathway for professionals to master greenhouse gas (GHG) accounting, carbon footprint measurement, Scope 1, Scope 2, and Scope 3 emissions, and climate-risk reporting. As organizations accelerate Net Zero, decarbonization, ESG, and climate action strategies, accurate emissions data has become essential for regulatory compliance, investor confidence, supply-chain transparency, and credible sustainability reporting. This course equips participants with the knowledge and practical skills required to establish, manage, verify, and improve organizational GHG inventories using recognized principles and frameworks such as the GHG Protocol, ISO 14064, science-based targets, and emerging climate disclosure requirements.

Participants will learn how to transform operational data into reliable emissions inventories, identify material emission sources, apply appropriate emission factors, manage data quality, calculate CO?e, document assumptions, and communicate results for ESG reporting and Net-Zero transition planning. Through interactive exercises, real-world case studies, group activities, inventory-building simulations, and practical data-analysis sessions, the training connects technical GHG accounting with strategic decision-making. By the end of the program, participants will be able to develop a defensible corporate carbon inventory, identify high-impact reduction opportunities, strengthen Scope 3 value-chain accounting, and support credible decarbonization roadmaps and sustainability disclosures.

Programme Curriculum

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Course Duration

5 days

Course Objectives

By the end of the course, participants will be able to:

1. Understand the fundamentals of GHG accounting, carbon management, and organizational carbon footprints.
2. Apply the GHG Protocol Corporate Standard to develop a structured emissions inventory.
3. Identify and classify Scope 1, Scope 2, and Scope 3 emissions.
4. Establish appropriate organizational and operational boundaries.
5. Collect, validate, and manage high-quality activity data for emissions calculations.
6. Select appropriate emission factors and calculate CO?e emissions accurately.
7. Address Scope 2 location-based and market-based emissions.
8. Develop robust approaches to Scope 3 value-chain emissions and supplier data.
9. Apply GHG data quality, uncertainty, materiality, and documentation principles.
10. Understand ISO 14064, GHG verification, and assurance requirements.
11. Use inventory results to support Net-Zero targets, decarbonization, and climate strategies.
12. Integrate GHG data into ESG reporting, climate disclosures, and sustainability performance systems.
13. Identify emerging opportunities in digital carbon accounting, AI-enabled emissions analytics, and climate data management.

Target Audience

1. Sustainability and ESG professionals
2. Environmental managers and climate specialists
3. Carbon accounting and GHG inventory practitioners
4. Energy and facilities managers
5. HSE, EHS, and environmental compliance professionals
6. Supply-chain and procurement professionals managing Scope 3 emissions
7. Consultants, auditors, and sustainability reporting specialists
8. Corporate leaders and managers responsible for Net-Zero and decarbonization strategies

Course Modules

Module 1: GHG Accounting Fundamentals

- Introduction to climate change, GHGs, carbon footprints, and CO?e.
- Principles of relevance, completeness, consistency, transparency, and accuracy.
- Overview of GHG Protocol, ISO 14064, and carbon accounting standards.
- Understanding organizational carbon inventories and reporting cycles.
- Case Study: Developing a basic GHG inventory for a manufacturing company with multiple facilities.

Module 2: Organizational Boundaries and Scope 1 Emissions

- Establishing organizational boundaries using appropriate consolidation approaches.
- Identifying Scope 1 direct emissions from stationary and mobile combustion.
- Accounting for process, fugitive, and industrial emissions.
- Selecting activity data and appropriate emission factors.
- Case Study: Calculating Scope 1 emissions for a logistics company operating a mixed vehicle fleet.

Module 3: Scope 2 Energy and Electricity Accounting

- Understanding purchased electricity, heat, steam, and cooling emissions.
- Applying location-based and market-based Scope 2 methodologies.
- Managing electricity consumption data, renewable energy, and contractual instruments.
- Addressing renewable electricity claims and energy attribute certificates.
- Case Study: Comparing Scope 2 results before and after a corporate renewable energy procurement program.

Module 4: Scope 3 Value-Chain Emissions

- Introduction to the 15 Scope 3 categories and value-chain emissions.
- Screening, prioritizing, and calculating material Scope 3 categories.
- Supplier engagement and primary versus secondary data.
- Addressing purchased goods, transportation, business travel, waste, and product-use emissions.
- Case Study: Building a Scope 3 roadmap for a consumer-goods company with a global supply chain.

Module 5: GHG Data Management and Quality Assurance

- Designing a reliable GHG data collection system.
- Data validation, completeness checks, assumptions, and evidence management.
- Managing data quality, uncertainty, estimation, and emission-factor selection.
- Creating audit trails and documentation for GHG assurance.
- Case Study: Correcting data gaps and inconsistencies in an annual corporate carbon inventory.

Module 6: GHG Inventory Calculation and Reporting

- Converting activity data into CO?e emissions.
- Managing global warming potential factors and calculation methodologies.
- Developing inventory spreadsheets, dashboards, and carbon data management workflows.
- Preparing inventory summaries, management reports, and sustainability disclosures.
- Case Study: Creating an executive-ready GHG inventory dashboard for a multinational organization.

Module 7: Verification, ESG Disclosure, and Climate Reporting

- Understanding GHG verification, assurance levels, and evidence requirements.
- Preparing inventories for independent review and assurance.
- Linking GHG data with ESG, sustainability, and climate disclosures.
- Understanding the relationship between carbon inventories, climate-risk reporting, and investor expectations.
- Case Study: Preparing a corporate GHG inventory package for third-party verification and ESG disclosure.

Module 8: Net-Zero, Decarbonization, and Emerging Carbon Management

- Using GHG inventory results to identify decarbonization levers and reduction priorities.
- Connecting inventories with science-based targets and Net-Zero strategies.
- Understanding carbon reduction, renewable energy, electrification, efficiency, and supplier engagement.
- Exploring AI, automation, digital MRV, carbon intelligence, and real-time emissions analytics.
- Case Study: Developing a practical Net-Zero transition roadmap based on an organization's GHG inventory hotspots.

Training Methodology

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

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